

REMARKS

IN RESPONSE TO FINAL OFFICE ACTION MAILED 4/6/2006

1. Substitute Specification

Applicants are submitting a substitute specification on the attached pages. The Applicants also submit Replacement Figures for the figures previously numbered 15-19. The only changes to the Figures are to their numbering (now 5-9 instead of 15-19).

2. Rejection of Claims 65-81 as anticipated by Engel et al. (U.S. 6,115,393)

Claim 65, as amended, recites a computer program that causes a processor at an intermediate device between two TCP connection end-points to perform reassembly of TCP segments. That is, an intermediate processor reassembles bytes of a TCP data stream into their original order. To continue the analogy of "War and Peace" used by the Examiner, the processor not only receives the pages of "War and Peace" from within their TCP segment "envelopes", but sequences the pages and words in the right order even though they may have arrived out-of-order. This is in contrast with intermediate devices that receive the envelopes but merely forward them on their way as quickly as possible leaving reassembly for the end-point to perform.

The Examiner rejected claim 65 as anticipated by Engel stating that Engel performed TCP reassembly. Engel, however, does not explicitly or implicitly describe TCP segment reassembly.

Engel does describe buffers and queues as indicated by the Examiner. While it is not clear exactly which buffers and queues the Examiner is referring to, Engel does use frame buffers and queues to store packets/frames. Merely storing packets and frames in buffers and queues does not, however, describe TCP segment reassembly.

Engel's "Abstract" also describes monitoring packet content. As described in greater detail in the application, Engel accesses TCP segment headers to "loosely" determine the state of a TCP connection, determine events, or accumulate statistical data. While Engel describes accessing TCP headers, the Examiner has not identified a portion of Engel where the payload of the TCP segment is accessed, let alone where the payloads of different segments are reassembled.

As indicated by the Examiner in a previous Office Action, Engel does describe receiving TCP segments having sequence numbers. However, just because a device receives a TCP segment that includes a sequence number does not mean the device performs reassembly.

Engel does detect whether a TCP segment is out-of-order to log statistics about the number of out-of-order segments that occur in a connection. However, merely determining whether a segment arrives out-of-order is not the same thing as performing reassembly.

In response to the Examiner's comments, Applicants have amended claims 65 and 74 to clarify that the TCP segment reassembly occurs at a device intermediate to devices providing TCP end-points. However, after several Office Actions, Applicants are unsure exactly what the Examiner is deeming TCP segment reassembly in Engel.

Applicant : Narad, Chuck
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Intel Docket No.: P8220C12

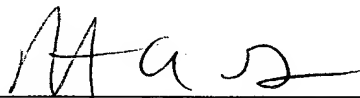
Applicants respectfully request greater elaboration on the Examiner's reasoning in rejecting claim 65 in the event the Examiner does not withdraw the rejection of claim 65.

Claim 65 and Claim 74 both recite similar limitations regarding reassembly. For at least the reason above, Applicants respectfully request withdrawal of the rejection of renumbered claims 65, 74 and their dependent claims.

3. In the event that any additional information or explanation is required, please call the undersigned attorney at 978-553-2060.

Respectfully submitted,

Date: 7/5/06



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